

Use of FY06 PD Funding & Improving Math/Science Offerings
Testimony – House Education Committee
January 30, 2006

- I. Focus of discussion today:
 - A. Description of how districts have used the funds allocated last year for the equivalent of one professional development day.
 - B. Teacher shortages in math/science.
 - C. Current efforts underway by the department to raise the achievement of all students, including addressing the achievement gap with specific references to efforts underway to improve math/science.
- II. Information on school district use of the funds provided through the 2005 enacted and signed student achievement and teacher quality legislation was collected from school districts using the Fall 2005 Basic Education Data System (BEDS). Funds were allocated to schools for adding the equivalent of one day (FTE) for high quality professional development for teachers in the 2005-2006 school year; 309 of Iowa school districts added an extra day; 31 districts added extended hours to different days; 25 districts added the time using weekend days or multiple methods for separate buildings.
 - A. High quality professional development is defined as activities that should provide for alignment with the Iowa Teaching Standards, development needs of teachers, research-based instructional strategies, and the specific student achievement needs as determined by data. These are the components that are outlined in the Iowa Professional Development Model as called for in the original TQ legislation. This would NOT include items such as mandatory trainings for child abuse, blood borne pathogens, hazardous chemicals, etc; parent-teacher conference days; teachers preparing in their classrooms; staff orientations; or time spent preparing grades/report cards/lesson plans, which are commonly referred to as teacher work days. The average number of professional development days increased from 5.38 in 2004-2005 to 6.63 in 2005-2006. (Table 1)
 - B. School districts decided on the best focus for the extra professional development day. Many districts reported focusing on multiple content areas. Often this was because different school buildings had different needs. For example, reading might be a priority in the elementary school, but the high school needed to focus on writing.
 - C. 302 districts reported that reading was a focus area (Table 2); 185 reported mathematics as a focus area. Topics included in the “other” category were very diverse and included writing, technology, classroom management, differentiated learning, and use of data, etc.
 - D. Along with the funding for the extra professional development day, additional funds could be used by school districts for either salaries or professional development, or both, as determined by the school district. These funds became known as “Pot 2.” 134 school districts reported using these funds for additional professional development time; 187 districts reported using these funds for additional compensation for teachers. 44 districts divided the funds between professional development time and teacher salaries (Table 3). A breakdown of the additional “Pot 2” funds is in Table 4 of the report.
- III. Projected teacher shortages in high school math/science.
 - A. Estimated retirements compared to those eligible for licensure (probably a conservative number as it is based on numbers of who are eligible to retire this year and the number of individuals who are eligible this year for a license; not all individuals will either retire or will actually become a teacher even if they get a license in 05-06).

- i. Math 159 can retire 105 eligible for license
- ii. Science
 - 1. Biology 141 66
 - 2. Chemistry 92 27
 - 3. Earth Science 43 16
 - 4. Physics 88 12
 - 5. Physical Science 58 20
- iii. We also track shortages by the number of vacancies that are posted on the Teach Iowa website hosted by the department.
- iv. Under NCLB, we must also track the assignment of teachers in certain academic areas as determined by the federal law – must report any teacher who is not fully certified for every academic assignment. For instance, an individual may have a teaching license with a history endorsement but may only have completed half of the hours needed for full endorsements for these courses h/she has been assigned to teach: civics & government, economics, and geography. The teacher is considered as not highly qualified although h/she has an Iowa license to teach. This sometimes occurs because a school district may only offer one section of the course rather than having a full load for a teacher. Overall, we have only 5% of our teachers who are considered not highly qualified by NCLB academic areas.
- v. Concern that we are seeing in Iowa.
 - 1. Decline in student teachers
 - a. High in 03-04 3,291
05-06 2,910 12% decline
 - 2. Just at Regents
 - a. High in 02-03 1,583
05-06 1,255 21% decline
 - 3. Elementary (always a high export area)
 - a. 04-05 1,947 eligible for licensure
 - b. 05-06 1,427 eligible
 - 4. Foreign language – no endorsements in Chinese; 1 in Japanese
 - 5. Even though we are projecting a slight (2.1%) decrease in K-12 student enrollment over the next five years, we have an aging teacher population, fewer individuals seeking a teaching degree, and specific areas that are of high concern. We still have overall more individuals ready to teach each year than the number we actually hire in Iowa – approximately 1,500 per year; the problems are in certain areas and the trend of fewer individuals entering the teaching profession. To get the best and brightest students requires the best and brightest into the teaching profession.

IV. Students currently enrolled in higher level math/science:

- A. P. 89 Condition of Education (COE) -- Math enrollments
- B. P. 90 COE – Chemistry
- C. P. 91 COE – Physics

V. Department efforts (HO that describes both the PD/TA efforts as result of TQ legislation and efforts to close the achievement gap).

- A. Math and Science
- B. Core curriculum – Language arts, Math, Science – international standards

VI. Comments from teachers involved in Second Chance Reading

VII. Conclusion

- A. If we hope to impact the achievement of our students – raise not only the test scores but also the readiness of students to succeed in their postsecondary pursuits – whether that is a technical degree, a 4-year degree, or even a job, we must continue to invest in quality professional development for our teachers. We can raise the bar for our students through graduation requirements, higher standards, increasing time in school, changing the offer and teach requirements for our schools, etc., but in the end it will be the quality of the teacher that will have the most impact on how much and how well students learn.
- B. DE prefilled bills – Teacher shortages, AP exams, training costs to support core curriculum